



What difference can a computer make  
to people who want to make a difference?



# According to these people, all the difference in the world.

Historically, computers in government could be placed in one of two categories:

Big and difficult to use. Or small and difficult to use.

Consequently, there were two categories of

people in government:

Those who didn't use computers. And those who had to rely on other people to use computers for them.

Today Apple® Macintosh® computers are



*Patrick D. O'Grady, Executive Director, Legislative Research Unit, Illinois General Assembly*



*Philip M. Grammatica, Data Processing Director, City of Anaheim*



changing that. By giving both groups of people a powerful personal computer they can effectively use now, as well as integrate with the systems they may already be using.

And, perhaps more important, Macintosh computers offer a technology platform upon which they can build for the future.

Which brings us to the people you see here.

People from all walks of government service, doing a variety of different tasks. But no matter

what jobs these people perform, they're all looking for basically the same thing: a computer that will help them—and the people they work with—do those jobs better.

Today they—and many of the people they work with—use Macintosh computers.

For everything from day-to-day office automation to desktop publishing to communicating with other types of computers.

We've asked them to tell you why.



*Thomas R. Piper, Director, State Health Planning and Development Agency, Missouri Department of Health*



# How to get more work done without doing more work.

When we introduced Macintosh, we offered people a powerful personal computer on which they could actually become productive in a remarkably short period of time.

We based its operation on images, or icons, from an environment people are already familiar with: their desks. A sheet of paper represents a document; a folder represents a group of related documents; a trash can disposes of the items you don't need any more.

Then we equipped every Macintosh with a mouse, so instead of having to remember cryptic command sequences, people could simply point and click to perform a desired task.

We designed Macintosh this way for an important reason.



*The first time you sit down at a Macintosh computer, you'll discover how easy it is to make your point.*

We believed that the sooner people became familiar with the way a computer worked, the sooner they could set about the task of improving the way they worked.

But there's much more to Macintosh than ease of use. It's a sophisticated personal computer that delivers the processing power to perform a wide range of office tasks.



*With a Macintosh computer and the right selection of software, you*

Power that is accessible today through a wide range of versatile applications—programs such as WordPerfect for word processing, Microsoft Excel for financial analysis, and 4th Dimension for database management.

Thomas Piper wasn't really sure what he wanted in a personal computer.

"But," he acknowledged, "I'll know it when I see it."

His background in architecture had given him a visual orientation—and that may be what initially drew him to Macintosh.

"All I remember is this high-resolution screen in a portable system that I could unplug and walk out the door with after work. And it didn't require that I learn a lot of complex command sequences. It was the exact tool I'd been looking for to help me express my ideas visually."

As for how the first Macintosh made it into the Missouri Department of Health, Piper relates the story this way.

"It was sort of a tag-team effort."

"Mark Roebuck, the public information specialist here at the Missouri Department of Health, and I started bringing our Macintoshes into work to help us with what we were doing. And people seemed to relate to them rather quickly."

To satisfy people's curiosity, they rented a third Macintosh, and then a fourth.

"The next thing we knew, they had taken root, and people were using them for a range of general office tasks. Word processing. Spreadsheets. You name it. And—because they suddenly could put some individuality into their work—they were taking a renewed pride in it."

According to Piper, this result was right in line with the philosophy of the department.

"As a public health organization, our job is to communicate information to people in as timely a manner as possible.





*may find yourself getting more done—without doing a lot more work.*

Which brings us to another important point:  
The fact that all Macintosh programs work in basically the same way—using understandable terms such as open, save, print, copy, and paste. So what you learn from using one program

can be applied to all the programs you use.

Whether you're pulling down a menu, moving a paragraph, printing a document, or changing a type size or style.

In fact, the independent accounting and consulting firm of Peat Marwick conducted a study of Macintosh in business and came to this concise conclusion: ease of use promotes use. Which drives training time—and costs—way down, and the amount of productive work time way up.

And that can make a person's job—specifically, *your* job—a lot less work.

It is also our task to ensure that the information is presented in an understandable way.

"Macintosh gave us a tool—as innocuous as a telephone or adding machine—that we could use to package and present health information in a compelling way. In our line of work, it's not enough to be right. We've got to get people past the cover and into the information that can, and usually does, directly affect them."

Currently the Missouri Department of Health has nearly 40 Macintosh computers networked together with a variety of other PCs—and another 17 are due any time. The person responsible for maintaining the smooth integration of these systems is Gail Baumhoer.

"From a purely financial standpoint, any government agency needs to maintain its current investment in technology for as long as possible. With Macintosh and select software packages, we still have access to the information on our existing systems," noted Baumhoer.

The integration of Macintosh computers has also had a couple of interesting side effects.

"Today more of our people are requesting Macintosh computers than any other. Because, even with only a brief exposure to it, they're able to produce something that looks good faster than they ever could before—and they can enjoy themselves while they do it. And they no longer have to settle for 12-point Courier type."

These people also know that front-end training time is minimal. "In fact, if they can type, we can have them up and running in a productive manner in less than two hours."



"Macintosh computers have allowed us to work with information in a whole new way. And we're adding new ones as fast as our budget will allow. But until supply meets demand, we'll still have to keep a few in a common area—and maintain a sign-up sheet."

Thomas R. Piper

*Director*

State Health Planning and Development Agency  
Missouri Department of Health





# How to make points. Clearly.

Part of what makes a Macintosh computer different from other personal computers is the way it uses pictures, whenever possible, to help make its point.

Macintosh also makes a difference when it comes to helping people get their ideas across—whether they are making a presentation or preparing a proposal.

Because with Apple Desktop Publishing, you have the tools necessary to turn your ideas into persuasive, professional documents and presentation transparencies.

In a remarkably short period of time.

Next-generation word processing programs such as Microsoft Word 3.0 and Ashton-Tate FullWrite Professional, and page composition programs such as Aldus PageMaker and Letraset Ready,Set,Go! 4.0 allow you to take information from a range of sources—charts from spreadsheet applications, graphics from clip art files, illustrations from drawing programs—and bring them all together into a single document.

Everything from memos and newsletters to department reports and documentation.

Which means you won't have to go a long way to prove your point.



"In the last year, we've been able to increase the number of legislative reports we produce by 55 percent—and we've done it with fewer people. A good portion of that increase can be traced to the introduction of Macintosh computers into our work environment."

Patrick D. O'Grady

*Executive Director*

Legislative Research Unit  
Illinois General Assembly



Among the tasks of the Legislative Research Unit in Springfield is to respond to the research requests of members of the Illinois legislature and their staffs.

The procedure involves researching a wide range of background information—everything from legal to financial to scientific data—and generating a concise, objective report that can be used by legislators to help them see an issue or a topic of debate more clearly.

When Patrick O'Grady was appointed to head the Legislative Research Unit, he had three goals:

"Do more. Do it better. And do it faster."

To that end, O'Grady and a team of associates embarked on an evaluation and planning process to completely automate the work flow of the unit.

"We had about 30 people and eight dedicated word processing systems. That meant the researchers had to do their first drafts by hand or on a typewriter. These were, in turn, handed off to the clerical staff, who typed them into the word processing system. Then back and forth for revisions."

At first it seemed like an efficient process.

But, according to O'Grady, it soon became clear that for the agency as a whole to excel in its efforts—and increase its visibility—a significant change was in order.

"The desktop publishing phenomenon coincided perfectly with our objectives for the unit. And ultimately, after reviewing word processing, office automation, and publishing systems from several suppliers, we chose Macintosh, because of how good it could make us—and our work—look on paper."



**Purpose:**

The LRU informs the staff of the State and prev. public po perform requested

**Staff:**

The LRU has staff (including support staff) have at least o of law, econor

**Work Products:**

In a typical year, t nearly 900 research imaginable topic. books, such as the Ill. Legislators; Tax Hand Directory of State Offi new legislators; Statisti State Capitol Visitors' C booklets for legislators to such as Laws for the Disa Laws for You, and others special reports assigned by such as day care, airport saf for receiving television sign Deficiency Syndrome, and o

**AIDS and Other Health Bills**

A number of strict AIDS-control measures were passed, including mandatory testing for marriage applicants, hospital patients, and prisoners; tracing contacts of persons infected with the virus; and confidentiality protections.

Services to the mentally ill and disabled are to be expanded. Bills require a study of needs of homeless mentally ill persons, establish rights for persons with developmental disabilities, and provide for community-based programs for them to increase the accessibility of services.

Other major areas of action included drug abuse, maternal and child health programs, and regulation of health professionals.

**AIDS**

**Blood Banks.** Existing regulations on several topics are codified into statute: AIDS-virus testing of donated blood, with infected blood disposed of unless used for research; confidential notification of infected donors; notice to would-be donors that blood will be tested, with opportunity to cancel donation. Won't apply in medical emergency (H.B. 1268, Greiman—Marovitz-Newhouse-Poshard).

(Cont'd. on p. 2, col. 3)

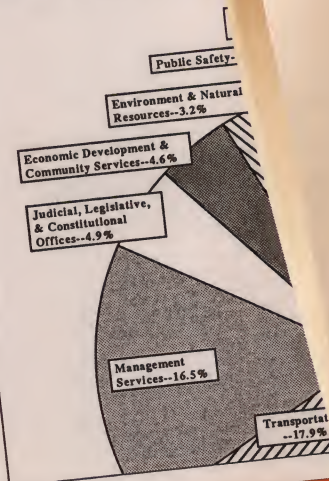
**Appropriations for Fiscal Year**

Total appropriations for state government as approved by the Governor for fiscal year 1988 were slightly over \$20.3 billion, or \$1,733 per resident.

Appropriations for Education (24.7%) and Human Services (24.4%) account for nearly half the total. Transportation uses 17.9%, and

Management Services appropriations include: judic constitution; economic commun' environ' (3.2%) busin serv

**Figure 1: Fiscal Year 1988 Illinois by Major Category**



- Contents**
- ☐ Environmental and Natural Resources Bills, page 7
  - ☐ About the LRU, page 11

**Figure 2:**

**Illinois Counties With Decrease in Equalized A Between 1981 and 1985**



Source: Compiled by Legislative Research Unit Statistics, 1981 and 1985.

It didn't take long for the results of their decision to become readily apparent.

"Macintosh gave us a way to meet our objectives. With it, we were able to create a unique, identifiable format for our work. And we could easily include charts, graphs, and other visuals in the reports to highlight a statistic or emphasize a point.

"Around here—as in any department that supports the efforts of the legislature—responsiveness is one of the most important advantages we can offer. Because when you're dealing with bills and committees, the operative word is deadline."

In other words, if a research paper is a day late for a committee meeting, it may as well be a year late.

"Our network of Macintosh computers has helped us decrease the turnaround time required for the reports we create. Which means we can accept requests for information later than before—and still deliver them on time."

With a Macintosh computer, a LaserWriter printer, and any of a number of available software packages, the time it takes to produce professional-quality presentations and proposals (such as these actual samples from the Illinois General Assembly Legislative Research Unit) can be reduced from weeks to days. You can even use Macintosh as a "front end" to professional typesetting equipment, such as the Linotronic 300.

To describe the impact his operation has made in the legislative community, O'Grady relates this story:

"There's a scene in *Butch Cassidy and The Sundance Kid* where Paul Newman and Robert Redford are being pursued by a relentless posse. The way people view us—and the quality of our work—can be summed up by what Newman says to Redford:

"Who are those guys?"  
"And around here, we kind of like that."



In government today, you'll find everything from multiple personal computers in a local area network, to department-level minicomputers with high-performance workstations, to main-frame setups with hundreds of terminals.

Understandably, any new addition to that environment must fit in as smoothly as possible.

Macintosh computers do—in more ways than you might think.

A good place to start is at the workgroup level.

Because what Macintosh computers have done for personal computing, AppleShare® is doing for workgroup computing.

AppleShare File Server software turns a dedicated Macintosh computer into a file server for storing all types of information—documents, graphics, applications. This data can, in turn, be accessed by other Macintosh computers—using the familiar Macintosh interface—over an AppleTalk® network. Data can even be accessed by MS-DOS systems.

And if you know how to use a Macintosh, you already know the basics of using AppleShare, because it shares the same familiar interface.

There are also solutions for using Macintosh computers with other network protocols, including TCP/IP, LU 6.2, and DECnet®. You can even choose from a variety of cabling schemes, including Ethernet, fiber-optic, twisted-pair, and more.

For those in a multivendor environment, Macintosh computers can be easily configured with additional hardware and software to share and exchange information with other personal computers and terminals.

For example, the DaynaFile disk drive allows Macintosh users to directly access both 3.5-inch and 5.25-inch MS-DOS disks. Then, using

Part of Phil Grammatica's job is to ensure that the complex network of computer systems within the MIS/DP department in the City of Anaheim works smoothly to accomplish one task: to help people do their jobs better.

"People who work in government here are motivated by something more than a paycheck. They choose to be here because they can make a difference—an improvement—in the lives of the people of Anaheim.

"And anything our department can do—in terms of letting them get the information they need—to make their jobs easier, we'll do."

Part of that task is for Grammatica and his operation to provide people with the office automation tools they need. He's even able to document the results of his department's efforts.

"Every year we do a survey of everyone in city government who uses information—from the city manager to the clerical staff. The last one came back with a 3.61 rating out of 4.0. So we're doing pretty well."

The other part is to manage the complex network of computers.

"I keep track of every piece of computer hardware in the city. We have Wang VS systems and word processors, DEC VAX® systems, HP 3000s, HP 1000s, IBM mainframes, and more. We also have over 50 Macintoshes throughout the various

## How to make a change without changing

MacLinkPlus software, the files stored on these disks can easily be converted to a format readable by Macintosh programs—with all data formatting intact.

Today you can also use a Macintosh computer to talk to systems manufactured by IBM, DEC®,



*Macintosh computers on an AppleTalk network can be used to communicate with systems from virtually all of the leading electronic mail, an AppleTalk network is an ideal way to get different*



departments—communicating with one another, with other PCs, and with most of the host systems.”

Today, Grammatica says, every one of the City of Anaheim’s MIS/DP technical services people is connected to the mainframe via Macintosh. They don’t even have their 3270 terminals anymore.

“That’s one of the most significant statements a technical MIS person can make. And I didn’t tell any of the people in this organization they had to use Macintoshes.

“They wanted them.”

According to Grammatica, Macintosh also gives people the ability to put their “signature” on their work.

“What we’ve discovered with Macintosh is that people can easily access the information they need from different host systems using terminal-emulation packages. Then, once they get the information from these various sources into the Macintosh format, they can set about creating intelligent documents—ones with graphics, charts, different typefaces and styles.

“And the best part is that they actually enjoy themselves while they’re doing it.”

As for how they feel about their Macintosh computers, Grammatica relays this observation:

“I’ve had people say they could take or leave their PCs. But I’ve had people say they’d kill me if I took their Macintoshes.”



“We’ve got nearly every kind of computer here in our operation—PCs, minis, and mainframes—from many different suppliers. And we can get Macintosh computers to communicate with virtually all of them.”

Philip M. Grammatica  
Data Processing Director  
City of Anaheim



# ange for the better ging a thing.

Hewlett-Packard, Wang, Data General, and others. In other words, you can easily add the advantages of a personal computer to the comparatively limited functionality of a computer terminal.

Finally, for those environments where

UNIX is the standard, we offer A/UX®, an enhanced implementation of AT&T UNIX® System V (with Berkeley 4.2 extensions) that brings the familiar Macintosh interface characteristics—including pull-down menus, windows, multiple fonts, and more—to that operating system.

There’s even a wide range of programming environments available for people with custom applications needs—including MacWorkStation™, a system for developing mainframe applications that use the Macintosh interface.

All of which means that no matter what kind of computer environment you’re in today, Macintosh can help you make a good thing even better.



vendors of computer equipment, including IBM, DEC, and others. In fact, for everything from peripherals sharing to computers—including Macintosh and MS-DOS systems—working together.



# How to start making a difference.

As soon as you make it easier for people to do their work, people will typically try to do more in their jobs.

So we'd like to familiarize you with our family of personal computers and printers, which have been designed to make it easier for people to work better—and to produce work that looks better.

	▶ Macintosh Plus	▶ Macintosh SE	▶ Macintosh II
Central processing unit (CPU)	7.8MHz 68000	7.8MHz 68000	15.7MHz 68020
Standard memory (RAM)	1 megabyte	1 megabyte	1 megabyte
	Expandable to 4 megabytes	Expandable to 4 megabytes	Expandable to 8 megabytes
System firmware (ROM)	128 kilobytes	256 kilobytes	256 kilobytes
Display monitor*	9-inch monochrome 512 x 342 pixels	9-inch monochrome 512 x 342 pixels	12-inch monochrome 640 x 480 pixels 13-inch color 640 x 480 pixels
Internal disk storage	One 800K disk drive	One or two 800K disk drives 20-megabyte hard-disk drive can be substituted for an 800K disk drive	One or two 800K disk drives 20-, 40-, or 80-megabyte hard-disk drive available
External hard-disk storage**	20, 40, or 80 megabytes	20, 40, or 80 megabytes	20, 40, or 80 megabytes

\*Larger monitors are available from third-party suppliers.

\*\*Large-capacity disk drives are available from third-party suppliers.

Take, for example, our family of Macintosh computers.

There's the Macintosh II—the fastest, most powerful Macintosh we've ever offered. It gives you extensive expansion options, as well as the graphic advantages of color.

Or the Macintosh SE. It's available with a 20-megabyte internal hard-disk drive, and it has an internal expansion connector so you can connect large-screen monitors, coprocessor cards, and more.

Finally, there's the original Macintosh Plus—

a compact system that can function as a stand-alone office system or in an AppleShare environment.

Coincidentally, we also happen to have a family of upgradable LaserWriter® printers.

Starting with the LaserWriter IIsc, an affordable, entry-level printer that connects directly to the SCSI port on a Macintosh Plus, Macintosh SE, or Macintosh II.

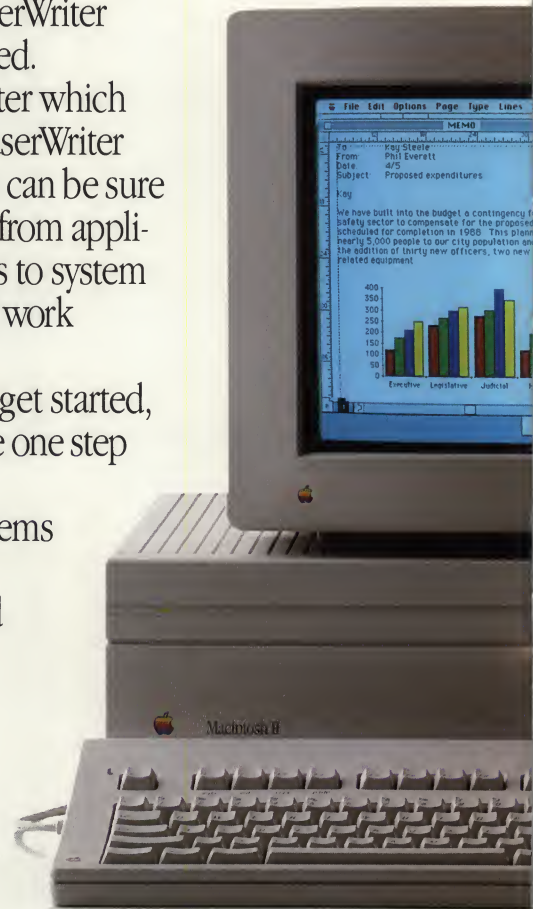
Or our LaserWriter IINT, a PostScript® printer that can be networked for sophisticated printing applications in multicomputer environments.

Finally, there's the LaserWriter IINTX, our high-performance PostScript printer that features a Motorola 68020 processor (the same as in the Macintosh II), making it the fastest LaserWriter we've ever offered.

And, no matter which Macintosh or LaserWriter you choose, you can be sure that everything from application programs to system peripherals will work together.

To help you get started, we've even gone one step further.

And the systems you see to the right are a good place to start.







Macintosh desktop publishing systems can be configured to meet virtually any publishing application. The following suggestions offer a frame of reference from which you can build a desktop publishing system—by starting with a Macintosh and then adding the appropriate hardware and software components.

## Desktop Publishing

Publishing	Entry Level	▶ ▶ ▶	Advanced
Computer	Macintosh SE	Macintosh II	Macintosh II
Hard-Disk Storage	20 megabytes	40 megabytes	80 megabytes
Monitor	Radius Full Page	Radius Two Page	SuperMac 19-inch Color
Printer	LaserWriter II <sub>nr</sub>	LaserWriter II <sub>trx</sub>	LaserWriter II <sub>trx</sub>
Support Systems	ThunderScan	Abaton Scan 300	Abaton Scan 300
<b>Software</b>			
Word Processing	Microsoft Word 3.0, WordPerfect, FullWrite Professional, WriteNow		
Publishing	PageMaker 2.0, QuarkXPress, ReadySetGo! 4.0, Interleaf Publisher		
Graphics	MacDraw, Adobe Illustrator, SuperPaint, Cricket Draw, Aldus FreeHand		
Presentations	PowerPoint, Cricket Presents..., MORE		

## Workgroup Computing

Workgroups	Basic Information Sharing	▶ ▶ ▶	Sophisticated Information Management
File Server	Macintosh SE	Macintosh II	Macintosh II
Disk Storage	20 megabytes	40 megabytes	80 megabytes
Cabling System	LocalTalk™	LocalTalk or PhoneNET	Ethernet or fiber-optic
Electronic-Mail Software	InBox or Microsoft Mail	InBox or Microsoft Mail	InBox or Microsoft Mail
File Server Software	AppleShare File Server	AppleShare File Server	AppleShare File Server
Print Server Software	AppleShare Print Server	AppleShare Print Server	AppleShare Print Server
Support for MS-DOS	LocalTalk PC Card and AppleShare PC	LocalTalk PC Card and AppleShare PC	LocalTalk PC Card and AppleShare PC



Configured as workgroup systems, Macintosh computers give people who work in groups the ability to easily exchange all types of information—text, graphics, and more. And, using additional hardware and software, a Macintosh workgroup can support and share files, peripherals, and background services (such as print spooling) with MS-DOS systems.

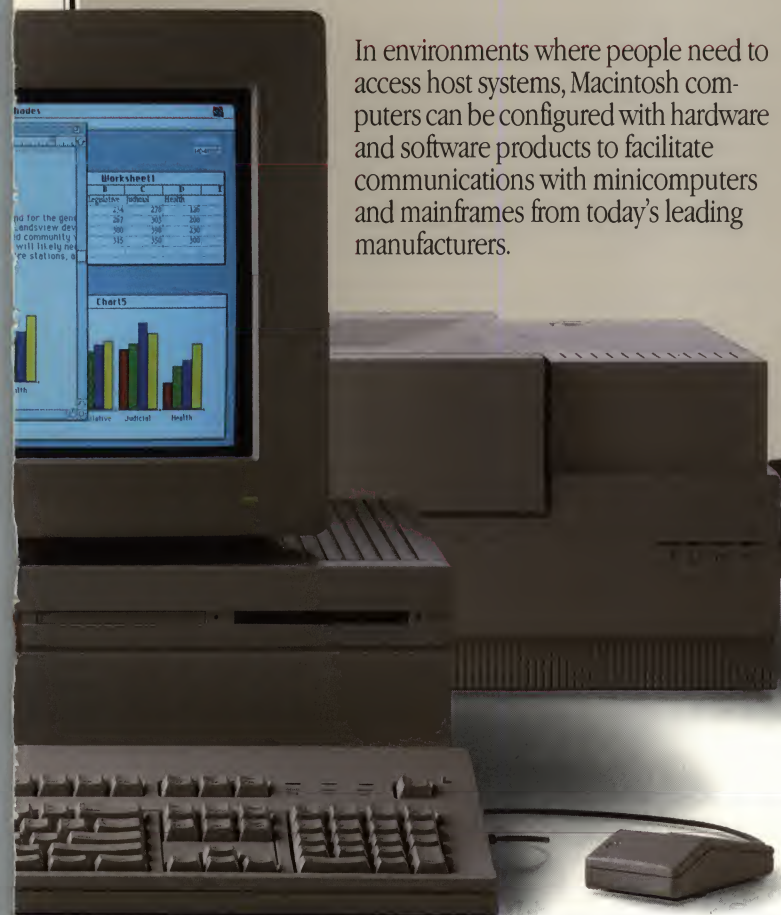
## Host Connectivity

Connectivity	Basic	▶ ▶ ▶	Advanced
Computer	Macintosh SE, II	Macintosh SE, II	Macintosh SE, II
Keyboard	Apple Keyboard	Apple Keyboard	Apple Extended Keyboard
Modem	Apple Personal Modem	Apple Personal Modem	Netway 1000A
<b>Host Services</b>			
	IBM	DEC	Wang
Terminal Emulation and File Transfer	Yes	Yes	Yes
Network Services (file server, print server, and/or electronic mail)	Yes	Yes	Yes



In environments where people need to access host systems, Macintosh computers can be configured with hardware and software products to facilitate communications with minicomputers and mainframes from today's leading manufacturers.

The Macintosh II computer has a full 32-bit data bus, a 68020 microprocessor, a 68881 floating-point coprocessor, and a high-performance NuBus architecture to handle the six available expansion slots. Macintosh II also brings 8-bit color capability to the Macintosh environment. And it can be equipped with one or two internal floppy-disk drives and a high-performance 20-, 40-, or 80-megabyte SCSI hard-disk drive.





# Call us and we'll show you how we work.

So far we've had a chance to provide you with an overview of how Macintosh can help people in government work better—individually and collectively, and with other computer systems that may already be in place.

But the best way to find out what a Macintosh can do is to see for yourself.

And the best way to do that is to contact an Apple Government sales representative at the toll-free number below, and arrange for a demonstration of the products you've seen here. Or visit an authorized Apple Government reseller.

When you do, you'll have a chance to ask questions about the Apple Training Alliance<sup>SM</sup>—our nationwide network of authorized training



providers—as well as our flexible service options, technical support programs, and software update policy.

You may also want to request a copy of the Macintosh Benefits Study (prepared by Peat, Marwick, Main & Co., May 1987), which offers some very compelling examples of how Macintosh computers have made a difference to people

in Fortune 100 companies.

But whatever you decide, there's one thing we'd like you to keep in mind:

That Macintosh fits the way people work, and the way people work together.

Which goes to show what a difference a Macintosh can make.

## Call 800-752-3131, Ext. 900

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